

Upper Class

Famous for the evergreen, affordable pure Class A A21a integrated, Sugden is moving upmarket with the brand new Masterclass IA4, which is the company's avowed flagship. David Price tries the high life...

It's one thing to do what is - in my opinion at least - one of the greatest £1,000 integrations, and another entirely to take the formula upmarket into the realm of high end pre-power combinations. This is exactly what Sugden are attempting with the new IA4, a monster integrated that retails for the princely sum of one pound short of £3,500.

The genius of the A21a (now in Series 2 incarnation, as reviewed in the August 2007 edition of Hi-Fi World and featured in this month's amplifier group test) is its superlative 'sound per pound' ratio - for some people running certain systems, that is. (It's not all things to men, nor does it try to be, meaning that its limited power and a lack of euphonious warmth will only suit a select bunch of audiophiles with relatively efficient speakers and a penchant for superlative clarity).

With substantially boosted power and extra facilities, the IA4 is much better able to bring that Sugden magic to a far wider audience, although here what limits its appeal is both its considerably higher price and the far tougher competition it faces. The question is - can that distinctive, icily clear Sugden sound, now wearing much bigger boots of course, compete in a whole new market? For example, the three and a half grand that the new Masterclass will set you back would practically buy you the superb MF Audio Copper Passive Pre (£1,599) and a pair of NuForce Reference 9v2s (£2,300) - which is a very nice combination indeed...

So the Masterclass IA4 has to be good. Well - if you'll pardon me putting the cart before the horses - indeed it is. But the real question

is, how good and to what end? The most obvious difference between it and its baby A21a S2 brother is its size - or should I say girth? The lovely slimline form of the A21 has been replaced by a rather portly 22kg behemoth which owes more to Japanese monster integrations in styling than anything else from these shores. It's a big, chunky affair at 165x430x440mm, and - to my eyes - not the prettiest thing in the room, but I suppose it's necessarily large, because full of air it isn't. Indeed, the sizeable casing is all about providing enough cooling for its full Class A circuitry which, like the A21a S2, runs hot.

Sugden's Patrick Miller says the Masterclass integrated, "was designed to extract the best performance possible from our A21a pure class A output stage. Although based closely on the design principles of the A21a, it is a far more sophisticated and developed unit".

Indeed, instead of just being an A21a on steroids, the company has pretty much redesigned the classic amplifier from top to toe. It features new high specification output transistors, completely redesigned power output boards, a custom made power transformer and high quality power supply, solid silver Teflon-coated loudspeaker wiring, silver plated steel 'mil spec' coaxial signal wires and a current feedback preamplifier stage with an almost constant bandwidth, it is claimed.

Indeed, Sugden says the only real similarity to the A21a is the Class A output circuit, but this has been heavily modified and is on new circuit boards, with careful improvements in capacitor smoothing and much greater power supply headroom.

Although rated at 32 watts per channel, the power supply has been "massively over engineered", with the main smoothing and decoupling capacitors being three times the physical size of the standard A21a with much greater current capabilities. This provides a 30% increase in the single ended HT voltage and quiescent current setting, the company says.

In truth, the IA4 can be described as an unusual hybrid design as it has a single-ended power output stage and a dual voltage DC coupled preamplifier. This requires two separate power supplies producing a true pre-power combination in a single box. Patrick Miller told *Hi-Fi World* that, "the preamplifier required a dual voltage to operate our current feedback Open-Loop Transimpedance design - this has a wide-bandwidth capability and low distortion." All inputs and outputs are relay switched with high quality silver contacts.

One nice touch is the standard phono stage - a moving magnet design incorporating a dual Bipolar/JFET operational amplifier. The advantages of this design on a dedicated moving magnet circuit are low noise, low distortion with a DC offset of less than 1mV making it ideal for the DC coupled circuitry, says Sugden. It's a shame that there's no moving coil input (especially considering the price), but a brief listen confirmed that the company has tried hard with the phono stage. It's easily the equal of a decent £300 offboard affair, and if you're running a moving coil cartridge, you can always save up for a Grainger Slee Elevator EXP (£509) head amp.

The IA4 is a nicely made bit of kit indeed, but isn't quite as



impressive in perceived build as the A21a S2 (due to it being nearly £2,500 pricier and not really any better finished). Sugden say the front panel is machined "from one of the finest grades of aluminium available called gauge plate - a ground flat plate used in the production of dies and precision jigs". All well and good, but the volume control still doesn't have the precise, silky action of a £500 Onkyo A-933 integrated, for example. Also, I found the top casework a tad too resonant for my liking. Rap the top plate with your knuckles and you get a rather undamped sounding 'ding', which is less than ideal. Still, it's streets ahead of Sugden of yore, and it's only when you've spent a month with a (£1,000 cheaper) Naim SuperNait, as I have, that this amp's build seems a let down. There are two finishes available - Titanium (silver) and Graphite (black); our review unit looked very swish in the former.

SOUND QUALITY

Listening to the IA4 is, as someone once said, "déjà vu all over again". It's perhaps a testament to Sugden's circuit design and/or voicing skills that they can make an amplifier with so few on-paper similarities to the A21a, yet that sounds so similar. What the new Masterclass integrated gives you, compared to its budget brethren, is more of the same. This is, as we'll see, is no bad thing...

Everything I loved about the original A21a, the newly revised S2 and of course the recent A21

SE, is there with the new IA4, but more so. What you get is a tremendously clean yet massively musical amplifier, with (for the first time) power aplenty. At least it's aplenty in Sugden terms, as this is no Rotel RB-1092 with 580 watts per side on tap. Rather, the claimed 32W [see MEASURED PERFORMANCE] simply takes one of my biggest reservations about the other, cheaper Sugdens, off my list of negatives.

Basically, this amp will drive most things to highish levels without any protest. In my system, this meant that - for the first time - I could turn the wick up without fear of the Sugden, or my loudspeakers, wilting under the sheer physical strain of everything. The IA4 simply doesn't have an issue with driving even moderately demanding loudspeakers, as the others did. This is, for the first time from Sugden, Class A without tears. What used to

"rarely have I heard an integrated that strings everything together in such a musical way..."

get in the way of me enjoying the company's superb amplifiers has now been removed. Although this amp isn't as commanding as, say, a Naim SuperNait, it shows far less concern about what it's asked to do, volume-wise or speaker-wise.

For example, cueing up a Classic Records reissue of Peter Gabriel's

REFERENCE SYSTEM

Technics SL1210/Audio Origami RB250/Lyra Dorian turntable
 Note Products PhoNote phono stage
 Marantz CD63 KI DP CD player
 MF Audio Silver Passive Preamplifier
 NuForce Ref 9SE power amplifiers
 World Audio K5881 (modified) power amplifier
 Yamaha NS1000M loudspeakers
 Quad ESL-989 loudspeakers

'Solsbury Hill' I heard an extremely assured sound. From an ultra wide soundstage, obviously more expansive than the recently reviewed Naim SuperNait for example, came that classic guitar refrain, with percussion bristling out from either loudspeaker with tremendous clarity and drive. Bass guitar was strong and insistent like no other Sugden I've heard (albeit a tad less physical than the aforementioned Naim flagship integrated), and vocals were tremendously engaging. As I've said before, Sugdens don't gild the lily with

extra syrup - there was no sense of artificial smoothing of Peter Gabriel's distinctive tones - instead this amplifier is so transparent that it was merely reporting about the quality of the disc, and sure enough, moving to my first generation Japanese pressing of the same caused that slight 'zing' to go.

Moving to Prefab Sprout's 'Tiffany's', and the Sugden again dived into the song's percussion – sounding razor-sharp and lightning-fast. It's arrestingly quick off the blocks, making even the Naim SuperNait sound a tad leaden in some respects, and reminds me most of a modern state-of-the-art tube amplifier in this respect. In my system, the IA4 wasn't so much bright in the upper midband as 'well illuminated'. This wasn't in any sense fatiguing in the way of most transistor amplifiers, because it was a result of stark clarity rather than classic transistor distortion. It threw everything into sharp relief, making my reference MF Audio Passive Pre/ NuForce Ref 95E actually sound a tad slow and cloudy by comparison.

Moving to a choice slice of BlueNote jazz, and the Sugden did its stuff like no other transistor amplifier I've heard. That spry midband threw out massive amounts of detail about the instruments and the position of the players in the mix, yet it strung everything together with such ease that you didn't notice unless you listened for it. The IA4 has a wonderfully 'up and at 'em' quality that just throws you right into the 'fray' of the musical event, leaping and bounding along with *insouciance*, making even the Naim SuperNait sound a tad too controlled and over self-conscious in this respect.

Well recorded electronic music was sheer bliss; Goldie's 'Inner City' was delivered with a speed and authority that took my breath away, making my preferred MF Audio/ NuForce pre-power combo of choice sound leaden and uncommitted. The other side of this was the Sugden's slight lack of depth in the bass; it's strong like no Sugden before it, but still there's less sense of the massive heft the NuForces or indeed the SuperNait can deliver when called up to so do. Don't get me wrong, this isn't so much a criticism as an



observation about its character – something to bear in mind when matching it to your system. In absolute terms it lacked the massive depth perspective delivered by my reference World Audio K5881 tube amplifier – the IA4 is nicely deep but doesn't quite drop back with the very best of them.

Anyone familiar with the Sugden sound will love its textural accuracy. At first listen the IA4 simply seems 'cleaner' than other amplifiers, being very open and direct and telling you all about the grain of the voice or the tonal patina of the instrument in great detail. It's only when you revert to other solid-state amplifiers, some costing considerably more, that you realise that they're terribly 'mushy', dull or coarse by comparison. For many, bored by solid-state's greyness and homogeneity but not wishing to get into that whole new can of worms that are valves (with their associated colourations) this amplifier is a joy.

Overall though, what best summed up this amplifier for me was playing my old, scratchy copy of Electric Light Orchestra's 'A New World Record'. Although the Sugden was telling me in no uncertain terms that I should have taken much better care of this particular slice of vinyl, and indeed also that the original recording quality itself was mediocre at

best (being thin, compressed, mixed-for-AM-radio fare), it still gave a tremendously enjoyable rendition of 'So Fine'. Brilliantly rhythmic, effortlessly dynamic and with breathtaking speed, it made the song romp along and caught every last ounce of its feel.

CONCLUSION

To my ears, this is the best Sugden amplifier yet. Happy to mix it with £4,000 (or more) amplification, it's just as price-competitive as the cheaper A21a S2, and brings so much to all music it plays. Rarely have I heard an integrated amplifier that dives into any given piece of music, throws out so much detail and yet strings it together in such a musically satisfying way. Sugden fans unnerved by its amazing across-the-board ability can relax, as there are still a few operational foibles and question marks over the slightly resonant top plate, but the overall verdict is one of wide-eyed admiration for a glorious integrated amplifier.

VERDICT

Dazzlingly fast, musical sound allied to breathtaking detail and a useful amount of power make this Sugden's best ever integrated amplifier – pure class!

SUGDEN IA4

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FOR

- breathtaking clarity
- dizzying speed
- tonal accuracy
- phonostage

AGAINST

- resonant top plate
- volume control action
- size

MEASURED PERFORMANCE

The Sugden runs hot, but then it is Class A and this was obvious when looking at its high frequency distortion residual: there were no crossover spikes, just second harmonic. Our spectrum analysis shows this, except that full scale is 0.1% and at 0.001% the Sugden's distortion is barely visible, it is so low. These characteristics are maintained at higher outputs, but having said that the amplifier is limited in what it can deliver. Using sine bursts to avoid the current limiters, it produces 30 watts into 8 Ohms and 45 watts into 4 Ohms. This is fine, providing reasonably sensitive loudspeakers are used. It will run louder than an A21a, but with its super clean Class A output I would expect Sugden's famous treble sweetness to be maintained.

Bandwidth was wide, frequency response measuring 5Hz up to a very high 170kHz. A high damping factor of 47 suggests a reasonable amount of feedback has been used, and that bass will likely sound quite tight.

Sensitivity was high at 120mV, allowing the IA4 to work with all sources, even old ones with low output.

The phono stage was accurately equalised, low in noise and high

in sensitivity, measuring well in all respects.

The IA4 measured well all around. It is a classic Class A design, with limited power output accompanied by plenty of heat, but its output is all but distortion free. NK

Power	30 watts
CD/tuner/aux.	
Frequency response	5Hz-170kHz
Separation	70dB
Noise	-88dB
Distortion	0.001%
Sensitivity	120mV
Damping factor	47

DISTORTION

